

REMARKS

Reconsideration and removal of the grounds for rejection are respectfully requested.

Claims 22-40 were in the application, claims 25 and 26 have been amended and claims 31-40 have been allowed.

Claims 25 and 26 were rejected under 35 U.S.C. §112. Claim 25 has been amended to depend from claim 22 and claim 26 amended to provide proper antecedent basis for “an inner run” of the first endless belts. Consequently, the rejection has been rendered moot.

Claims 22-24, 26 and 27 have been rejected under 35 U.S.C. §103(a) as being obvious over Benz in view of Schmermund in view of Draghetti.

In order to uphold a finding of obviousness, there must be some teaching, suggestion or incentive for doing what the applicants have done. A.C.S. Hospital Sys. Inc. V. Montefior Hospital, 723 F.2d 1572 (Fed. Cir. 1984). It is not within the framework of 35 U.S.C. §103 to pick and choose from the prior art only so much as will support a holding of obviousness to the exclusion of other parts necessary for full appreciation of what the prior art teaches or suggests, as hindsight is not the test. In re Wesslau, 353 F.2d 238 (CCPA 1965). Also, “both the suggestion and the expectation of success must be found in the prior art, not in the applicants’ disclosure”. In re Dow Chemical Co., 837 F.2d 469 (Fed. Cir. 1988).

“[C]iting references which merely indicate that isolated elements and/or features recited in the claims are known is not a sufficient basis for concluding that the combination of claimed elements would have been obvious. That is to say, there should be something in the prior art or a convincing line of reasoning in the answer suggesting the desirability of combining the reference in such a manner as to arrive at the claimed invention.” Ex parte Hiyamizu, 10 U.S.P.Q. 2d.

1393 (POBA 1988).

It is clear that the Examiner is picking and choosing various elements from the prior art without any teaching, suggestion or incentive to do so.

A specific feature of the proposed machine is that both the first means and second means are active moving means. The first means (pair of first endless belts) and the second means (pair of second endless belts) are specifically designed for cooperating with each other to clamp the wrapping sheet by acting contemporaneously against its two opposite surfaces and to accomplish the following operations:

- for receiving (in a clamping manner) a wrapping sheet from conveying means situated upstream;

- for pulling and keeping the sheet (in a clamping manner) in correspondence to the working station. For this aim, both the first means (pair of first endless belts) and the second means (pair of second endless belts) are driven and operated synchronously with the same speed for contemporaneously clamping the two surfaces of the wrapping sheet to feed, place and maintain the wrapping sheet in a vertical position in correspondence to the working station (Page 10, Line 15 - Page 11, Line 8, and Figure 7). This is accomplished without the help of suction means by only using the simultaneous clamping action of the first means (pair of first endless belts) and the second means (pair of second endless belts). (Page 11, Lines 9-10).

The invention avoids the curling or the stretching of the upper portion F_s and the lower portion F_i of the wrapping sheet during the folding of the sheet around the stack by using the simultaneous clamping action of the first means and the second means (Page 14, Lines 21-33). In fact, thanks to the contemporaneous and specific action of the pair of the first endless belts 18

and the pair of the second endless belts 22 (and optionally the pair of third endless belts) which simultaneously clamp the two opposite surfaces of the sheet, during the hitting of the stack P against the sheet F, the upper portion F_s and the lower portion F_i of the sheet F are not subjected to curling or stretching. The upper portion F_s of the sheet F is fed by the pair of first endless belts and the pair of second endless belts at a speed V_c equal to the speed of the extrusion of the stack from the opposite surfaces of the base 8 and pressing plate 33, while the lower portion F_i of the Sheet F remains tight on the inner runs 28A of the third belts.

In Schmermund (US 3,385,026) the cut lengths of the wrapping material are fed under gravity to a conveyor indicated by reference numeral 7. The conveyor has two parallel elongated conveyor belts 8 which travel around stationary suction means 11 communicating with the outside through perforations 12 for holding the lengths or wrapping material while fed beyond a path 13 for articles to be wrapped. Adjacent the conveyor belts 8 and at both sides of the path 13 suction devices in the shape of suction block 16 are provided, which are motionless fixing means. (Col. 1, Line 66 - Col. 2, Line 7).

The embodiment of the wrapping machine proposed by Schmermund operates as follows:

Each length 6 of wrapping material is held by suction to both conveyor belts 8 and is moved until the length 6 lies substantially symmetrical with regard to the feed path 13 for the article 21. When this position has been reached, the suction effect exerted by the suction means 11 of the conveyor belt 8 (first means) ceases, and the suction effect exerted by the suction blocks 16 starts so that the length 6 of the wrapping material is removed from the conveyor belts 8. The length 6 of the wrapping material is held stationary by the suction blocks 16 independently of the conveyor belts 8.

An article 21 to be wrapped is pushed by the pushing means 18 against the length 6 of the wrapping material which under the pressure exerted by the article 21 slides along the suction blocks 16.

It will be observed that during folding the length 6 of the wrapping material is removed from the conveyor belts 8 and held slidably by the suction blocks 16. Therefore the wrapping process is independent of the movement of the conveyor belts 8. (Col. 2, Lines 14-43).

Schmermund does not teach a first active moving means 8 and second active moving means 16 designed for simultaneously receiving a wrapping sheet from conveying means situated upstream, for pulling said sheet to a working station, for clamping said sheet in the working station.

In Schmermund only the first means the conveyor 8 are active moving means, while the suction blocks are stationary and motionless. The wrapping sheet is not clamped simultaneously by any first means and second means acting contemporaneously against both the surfaces of said sheet, as is done in the applicant's invention.

In fact, each length 6 of wrapping material is held by only suction, that is, the conveyor belt 8 uses suction to hold the material and, then, when the suction effect exerted by the suction means 11 of the conveyor belts 8 ceases, the suction effect exerted by suction blocks 16 starts so that the length 6 of the wrapping material is removed from the conveyor belts 8. The length 6 of the wrapping material is held stationary then only by the suction blocks 16 independently of the conveyor belts 8.

The wrapping sheet is kept in a vertical position in the working station only by the suction action through the conveyor belt or with the suction blocks.

In the wrapping process, during folding the length 6 of the wrapping material removed from the conveyor belts 8 and held slidably by the suction blocks 16, stretches the sheet which is kept by the suction means on one side and pushed by the stack on the other.

When the cut lengths of the wrapping material are fed under gravity to the conveyor, the front edge of the cut lengths is not clamped between first means and second means and a curling of the front edge due of its flexibility is not avoided.

Therefore, the person having ordinary skill in the art, acknowledging the content of Benz in view of Schmermund , would not be able to find any teaching to provide Benz et al with a first moving means and a second moving means, as is in the claimed invention.

In Draghetti (US 5,845,464 see Fig. 3 variation), a cutting device 20 is located close to assembly 18, and unit 5 comprises two known suction belts 32 and 33, the first of which is controlled by a drive unit 34 and is interposed between device 20 and station 4, and the second of which is located downstream from station 4 and controlled by a drive unit 35. Belts 32 successively receive sheets cut by device 20 and feeds them to station 4, while belt 33 receives the portion of each sheet 6 extending beyond station 4 prior to the intercept instant. In unit 5, sheet 6 is detached from strip 19 before sheet 6 reaches the intercept position, as opposed to after, as in the case of unit 5, shown in Figure 1 (Col. 4, Lines 41-52).

Draghetti teaches only first means constituted by a unit 5 including two suction belts 32 and 33, the second located downstream from station 4 acting against only one surface of the wrapping sheet. A problem in the Draghetti machine is that the sheet 6 is detached from the strip before the sheet 6 reaches the intercept position and the second suction belts 33. A curling of the front edge of the wrapping sheet may arise. This problem is caused by the fact that no means are

provided for acting against the other surface of the wrapping sheet contemporaneously with the action of the first means.

Draghetti does not teach the use of a first means 8 and a second means 16 designed to simultaneously act for receiving a wrapping sheet from conveying means situated upstream, for pulling said sheet to a working station, for clamping said sheet in the working station.

Draghetti teaches only a first means acting against a single surface of the sheet. Draghetti teaches only how to use endless belts for acting against one sole surface of the sheet with the help of suction means. Consequently, the combination with Draghetti does not teach or suggest the claimed invention, and the rejection should be withdrawn.

Claims 29 and 30 were rejected as being obvious under 35 U.S.C. §103(a) over Benz in view of Schmermund in view of Draghetti in further view of Hammacher.

The examiner accepts that the right angle pulling elements are not disclosed in the combination of Benz, Schmermund and Draghetti, and proposes that Hammacher et al teaches such pulling elements. However, the examiner is picking and choosing elements from various patents without any teaching suggestion or incentive to do so.

Hammacher et al (US 5,309,697), relates to a method and an apparatus for supplying, wrapping and grouping individual flat strip-like articles, in particular chewing gum strips. The packaging machine described in Hammacher comprises a first fastly running section through which the individual articles pass continuously. The first fast section has this high performance whilst in the second slow machine section in the grouping of the articles a reduction takes place with a ratio related to the number of strips assembled per package. Thus, the output of the packaging machine with continuous running is variably controlled. The supply region 100 of this

packaging machine is followed by the wrapping region 300. The transfer conveyor 190 is followed by a wrapping conveyor 310 on which the chewing gum strip 10 are further accelerated and on which they are individually wrapped with constant mutual spacings. The wrapping conveyor 310 is formed by a chain transport system 310 on which individual entraining members 310 are pivotally mounted. To control the pivot movement of the entraining members 314, in the chain transport system 312 curved path 316 are provided on which entraining members engage by means of rollers 318. This control makes the entraining members 314 pivotal in the conveying direction in such a manner that at the start of conveying path 320 of the continuously circulating chain transport 312, they pivot into the conveying path 320. In doing so, they engage the transfer wheel 190 and continuously receive the individual chewing gums from said wheel by engaging behind said gums. The entraining member 314 then further push the chewing gum along the conveying path 320 of the wrapping conveyor 310. To vary the control of the pivot movement of the entraining members 314, the form of the curved paths 316 may be varied by longitudinally displacing the curve in the conveying direction and/or changing the steepness of the curves.

The task of the entraining member 314 of the packaging machine described in Hammacher is to push the chewing gum strips with a speed that is variably controlled.

The articles to be packaged in the machine proposed are chewing gums that are smaller and lighter than the stack of multiply papers to be packaged and wrapped by the invention of the present application.

The entraining member of the conveyors described in Hammacher are not subjected to possible anomalous stresses in view of the light weight of the conveyed chewing gums to convey.

Hammacher does not face the problems of conveying articles of a significant weight which may cause anomalous stresses.

In fact, Hammacher does not give any teaching about the possibility to connect the pulling elements in a removable way to the inner ring of the conveyor.

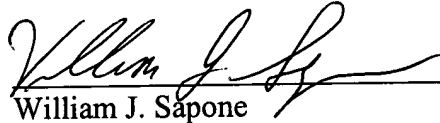
The present invention, on the contrary duly faces and takes into consideration this problem, solving it by proposing pulling elements which are advantageously connected in a removable way to the inner ring of the first line.

The person having ordinary skill in the art, knowing the contents of Benz patent in view of the content of Hammacher would have not been able to obtain any teaching and incentive to provide the pulling elements with detachable means so as to allow them to be disengaged from the inner ring of the conveyor if stresses acting on said pulling element overcome a predetermined value.

The person having ordinary skill in the art would at best only have arguably connected the pulling elements to the inner ring of the conveyor in a pivotally manner so as to maintain them in vertical position with respect of the inner ring, and such does not render the present invention obvious.

Based on the above amendments and remarks, favorable consideration and allowance of the application is requested. However should the examiner believe that direct contact with the applicant's attorney would advance the prosecution of the application, the examiner is invited to telephone the undersigned at the number given below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "William J. Sapone", written over a horizontal line.

William J. Sapone

Registration No. 32,518

Attorney for Applicant(s)

Coleman Sudol Sapone P.C.
714 Colorado Avenue
Bridgeport, CT 06605
Telephone No. (203) 366-3560
Facsimile No. (203) 335-6779